



1

## SEQUENCE LISTING

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<120> Uses of Kappa-Conotoxin PVIIA

<130> 2314-268

<140> US 10/627,685  
<141> 2003-07-28

<150> US 09/666,837  
<151> 2000-09-21

<150> US 60/219,438  
<151> 2000-07-20

<150> US 60/155,135  
<151> 1999-09-22

<160> 26

<170> PatentIn Ver. 2.0

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<213> Conus purpurascens

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<221> PEPTIDE  
<222> (1)..(27)  
<223> Xaa at residue 2, 7, 18, 19, 22 and 25 may be Arg,  
homoarginine, ornithine, Lys, N-methyl-Lys,  
N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, any  
synthetic basic amino acid, His or halo-His; Xaa at

<220>  
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<222> (1)..(27)  
<223> residue 4 may be Pro or Hyp; Xaa at residue 9 and  
23 may be Phe, Tyr, meta-Tyr, ortho-Tyr, nor-Tyr,  
mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,  
O-phospho-Tyr, nitro-Tyr, Trp (D or L), neo-Trp,

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<222> (1)..(27)  
<223> halo-Trp (D or L) or any synthetic aromatic amino  
acid; Xaa at residue 11 is His or halo-His

<400> 1  
Cys Xaa Ile Xaa Asn Gln Xaa Cys Xaa Gln Xaa Leu Asp Asp Cys Cys  
1 5 10 15

Ser Xaa Xaa Cys Asn Xaa Xaa Asn Xaa Cys Val  
20 25

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<223> Xaa is Hyp

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Cys Arg Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys  
1 5 10 15  
Ser Ala Lys Cys Asn Arg Phe Asn Lys Cys Val  
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1 5 10 15  
Ser Arg Lys Cys Asn Ala Phe Asn Lys Cys Val  
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1 5 10 15  
Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
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1 5 10 15

Ser Arg Ala Cys Asn Arg Phe Asn Lys Cys Val  
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Cys Ala Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys  
1 5 10 15

Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
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1 5 10 15

Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
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Cys Arg Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys  
1 5 10 15

Ser Arg Lys Cys Asn Arg Phe Asn Ala Cys Val  
20 25

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 Cys Lys Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys  
 1 5 10 15

Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
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 1 5 10 15

Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
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 1 5 10 15

Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
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 1 5 10 15

Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
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Cys Gln Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys  
1 5 10 15

Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
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1 5 10 15

Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
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1 5 10 15

Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
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1 5 10 15  
Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
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<400> 17  
Cys Arg Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys  
1 5 10 15  
Ser Arg Lys Cys Ala Arg Phe Asn Lys Cys Val  
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Cys Arg Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys  
1 5 10 15  
Ala Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
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1 5 10 15  
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Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
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1 5 10 15  
  
Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
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1 5 10 15  
  
Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
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Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Ala  
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Cys Arg Ile Ala Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys  
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Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
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Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
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Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val  
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